L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1994:613038 CAPLUS
DN 121:213038
TI Crosslinkable derivatives of **collagen**, process for their preparation, and their use in the preparation of biomaterials for prostheses or other medical articles
IN Gagnieu, Christian
PA Flamel Technologies, S. A., Fr.
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

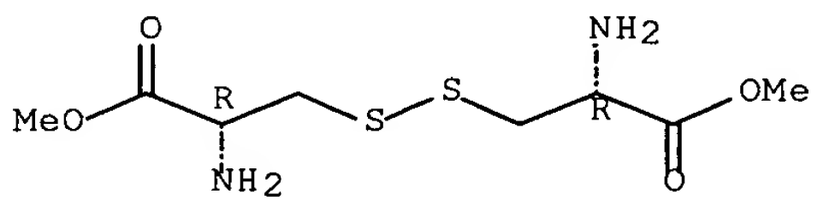
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 575273	A1	19931222	EP 1993-420255	19930617
	EP 575273	B1	19971203		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	FR 2692582	A1	19931224	FR 1992-7692	19920618
	FR 2692582	B1	19980918		
	US 5412076	A	19950502	US 1993-77605	19930617
	AT 160798	E	19971215	AT 1993-420255	19930617
	ES 2113511	T3	19980501	ES 1993-420255	19930617
	JP 06080935	A2	19940322	JP 1993-148108	19930618
PRAI	FR 1992-7692		19920618		

AB Crosslinkable **collagens** are disclosed which are sol. in water and/or aprotic polar org. solvents; the **collagens** have a free or substituted thiol function on residues of cysteine or derivs. thereof (homocysteine, cysteamine, etc.), the residues being bonded to **collagen** at least in part via a spacer compd (e.g. a dicarboxylic acid). Prepn. of the modified **collagens** is also provided. The modified **collagens** are useful for biomaterials for medical articles (prostheses, implants, etc.). Thus, a cysteaminyl succinyl **collagen** was prepd. using bovine atelocollagen types I and III and disuccinylcystamine. The product was used in the formulation of a gel and of a film. Ex vivo evaluation of tissue adhesion (with rabbit muscle tissue) using a product of the invention is also described.

IT **1069-29-0DP**, Cystine dimethyl ester, reaction products with succinyl atelocollagen
RL: PREP (Preparation)
(prepn. of, for crosslinkable **collagen** thiol deriv. for biomaterial for prosthetic or other medical article)

RN 1069-29-0 CAPLUS
CN L-Cystine, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



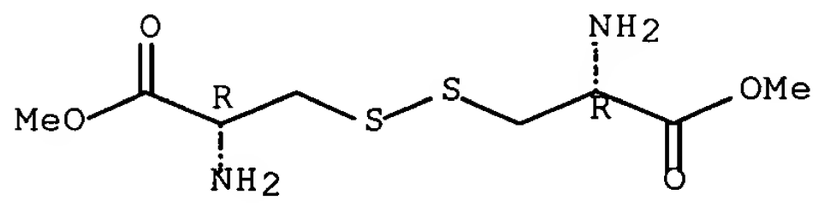
IT **1069-29-0**, Cystine dimethyl ester

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in crosslinkable **collagen** thiol deriv. prepn. for biomaterial for prosthetic or other medical article)

RN 1069-29-0 CAPLUS

CN L-Cystine, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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L2             96 S L1 FUL

     FILE 'CAPLUS' ENTERED AT 16:43:08 ON 12 DEC 2003
L3            293 S L2
L4             49 S L3 AND (ASPART? OR GLUT?)
L5              1 S L4 AND COLLAGEN?

=> s l3 and collagen?
          90369 COLLAGEN?
L6                3 L3 AND COLLAGEN?

=> s l6 not l5
L7                2 L6 NOT L5

=> d bib abs hitstr 1-
YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):y
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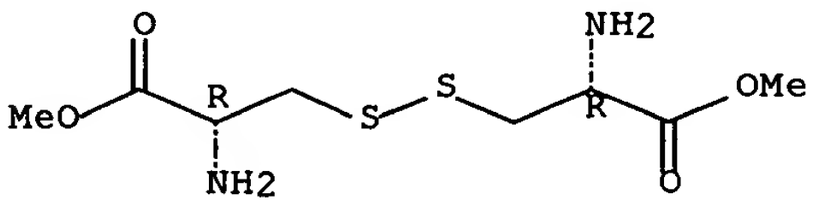
L7 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:61212 CAPLUS
DN 130:111488
TI Improved regenerated **collagen** fiber and method of manufacturing the same
IN Sakashita, Shinichi; Tsugawa, Mamoru; Goto, Masaoki; Matsumura, Kunihiko; Hirokawa, Norio
PA Kaneka Corporation, Japan
SO Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 890663	A2	19990113	EP 1998-112889	19980710
	EP 890663	A3	19990714		
	EP 890663	B1	20021113		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 11323727	A2	19991126	JP 1998-116819	19980427
	CN 1207422	A	19990210	CN 1998-117804	19980709
	CN 1100165	B	20030129		
	US 6160096	A	20001212	US 1998-113423	19980710
PRAI	JP 1997-186794	A	19970711		
	JP 1998-61378	A	19980312		
	JP 1998-116819	A	19980427		

OS MARPAT 130:111488
AB The title fibers exhibit draping, luster, and feel close to those of a natural protein fiber such as a human hair and capable of application of a permanent wave treatment, wherein the amino groups and/or carboxyl groups of the regenerated **collagen** are chem. modified to introduce mercapto groups and/or disulfide linkages. Thus, regenerated **collagen** fibers were treated with a soln. contg. cystamine dihydrochloride and 1-ethyl-3-(3'-dimethylaminopropyl)carbodiimide HCl.
IT **32854-09-4DP**, L-Cystine dimethyl ester dihydrochloride, reaction products with regenerated **collagen** fibers
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(modified regenerated **collagen** fibers for permanent wave treatment with retention of waved shapes)
RN 32854-09-4 CAPLUS
CN L-Cystine, dimethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



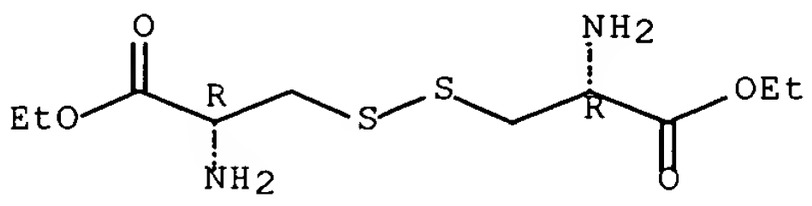
●2 HCl

L7 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1995:774579 CAPLUS
DN 123:208920
TI Thiol-containing biomaterials for medical and pharmaceutical use
IN Constancis, Alain; Soula, Gerard
PA Flamel Technologies, Fr.
SO Fr. Demande, 28 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2707992	A1	19950127	FR 1993-9198	19930721
	FR 2707992	B1	19951013		
	WO 9503272	A1	19950202	WO 1994-FR914	19940721
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 710226	A1	19960508	EP 1994-922288	19940721
	EP 710226	B1	19981014		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 09503490	T2	19970408	JP 1994-504980	19940721
	AT 172191	E	19981015	AT 1994-922288	19940721
	US 5646239	A	19970708	US 1996-578539	19960306
PRAI	FR 1993-9198		19930721		
	WO 1994-FR914		19940721		

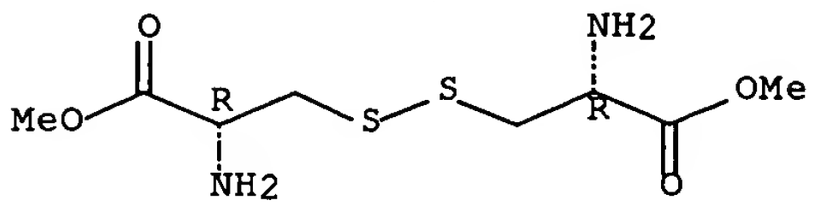
OS MARPAT 123:208920
AB Thiol-contg. biomaterials for medical and pharmaceutical use are prepd. from condensation of a dicarboxylic acid with a S-contg. amino acid or its derivs. (Markush structure given). The compns. are used for prepn. of sutures, prosthetics, adhesives and controlled-release prepns. Thus, 3 g [CH(CH2)2CONHCH(COOH)CH2S:SCH2CH2(COOH)NH]n (prepn. given) and 2.87 g dithiothreitol was dissolved in 70 mL water under N, pH = 8.5, and stirred for 3 h to obtain [SHCH2CH(COOH)NHCO(CH2)2CONHCH(COOH)CH2SH]n.
IT **583-89-1P 22888-38-6P**
RL: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(thiol-contg. biomaterials for medical and pharmaceutical use)
RN 583-89-1 CAPLUS
CN L-Cystine, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 22888-38-6 CAPLUS
CN L-Cystine, dimethyl ester, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●x HCl

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L1                STRUCTURE UPLOADED
L2             96 S L1 FUL

     FILE 'CAPLUS' ENTERED AT 16:43:08 ON 12 DEC 2003
L3            293 S L2
L4             49 S L3 AND (ASPART? OR GLUT?)
L5              1 S L4 AND COLLAGEN?
L6              3 S L3 AND COLLAGEN?
L7              2 S L6 NOT L5

=> s l3 and graft?
         106892 GRAFT?
L8               2 L3 AND GRAFT?

=> s l8 not l7
L9               2 L8 NOT L7

=> d bib abs hitstr 1-
YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):y
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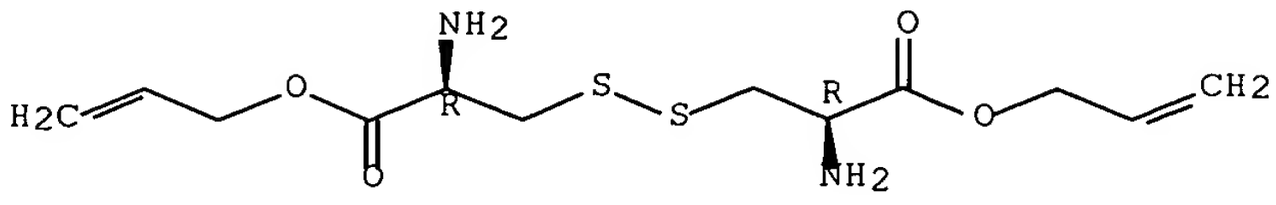
L9 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:636468 CAPLUS
DN 135:252520
TI Dimerizable Cationic Detergents with a Low cmc Condense Plasmid DNA into Nanometric Particles and Transfect Cells in Culture
AU Dauty, Emmanuel; Remy, Jean-Serge; Blessing, Thomas; Behr, Jean-Paul
CS Laboratoire de Chimie Genetique, CNRS/Universite Louis Pasteur de Strasbourg Faculte de Pharmacie, Illkirch, 67401, Fr.
SO Journal of the American Chemical Society (2001), 123(38), 9227-9234
CODEN: JACSAT; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
AB The size of condensed DNA particles is a key determinant for in vivo diffusion and gene delivery to cells. Gene mols. can be individually compacted by cationic thiol detergents into nanometric particles that are stabilized by oxidative conversion of the detergent into a gemini lipid. To reach the other goal, gene delivery, a series of cationic thiol detergents with various chain lengths (C12-C16) and headgroups (ornithine or spermine) was prepd., using a versatile polymer-supported synthetic strategy. Crit. micelle concns. and thiol oxidn. rates of the detergents were measured. The formation and stability of complexes formed with plasmid DNA, as well as the size, .xi.-potential, morphol., and transfection efficiency of the particles were investigated. Using the tetradecane/ornithine detergent, a soln. of 5.5 Kpb plasmid DNA mols. was converted into a homogeneous population of 35 nm particles. The same detergent, once oxidized, exhibited a typical lipid phase internal structure and was capable of effective cell transfection. The particle size did not increase with time. Surprisingly, the gel electrophoretic mobility of the DNA complexes was found to be higher than that of plasmid DNA itself. Favorable in vivo diffusion and intracellular trafficking properties may thus be expected for these complexes.
IT **142601-71-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(dimerizable cationic detergents with a low cmc condense plasmid DNA into nanometric particles and transfect cells in culture)
RN 142601-71-6 CAPLUS
CN L-Cystine, di-2-propenyl ester, bis(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)

CM 1

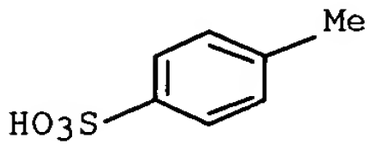
CRN 142601-70-5
CMF C12 H20 N2 O4 S2

Absolute stereochemistry.



CM 2

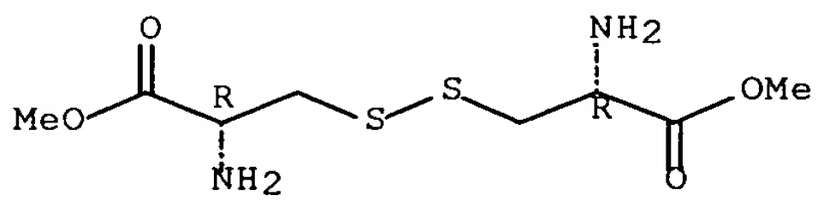
CRN 104-15-4
CMF C7 H8 O3 S



RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1994:442666 CAPLUS
DN 121:42666
TI Synthesis of amino-acid segmented polyetherurethane and its film modified
by heparin
AU Yang, Fuliang; Han, Yongxin; Feng, Xinde
CS Dep. Chem., Peking Univ., Beijing, Peop. Rep. China
SO Beijing Daxue Xuebao, Ziran Kexueban (1993), 29(6), 695-8
CODEN: PCTHAP; ISSN: 0479-8023
DT Journal
LA Chinese
AB SPEU-I and II were novel antithrombogenic polyetherurethane materials. Polyetherurethane (SPEU) was segmented with L-Lysine Me ester (L-Lys-OMe)
or L-Cystine di-Me ester (L-Cys-diOMe) as extenders. Heparin is covalently bounded on the SPEU film surface which can improve the antithrombosis of film. The exptl. results showed that both SPEU-I and SPEU-II products with the yields above 90%. Their IR, dynamic mech. properties and anticoagulant activities were measured. Both SPEU-I and SPEU-II have good blood compatibility and their morphol. research results
by the SEM photographs of the **grafted** films. After **graft** copolymd. with heparin, the SPEU films become opaque and the scanning electron micrographs clearly showed surface **graft** copolymn. of the films.
IT **1069-29-0P**, L-Cystine dimethyl ester
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and anticoagulant activity of)
RN 1069-29-0 CAPLUS
CN L-Cystine, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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L2             96 S L1 FUL

     FILE 'CAPLUS' ENTERED AT 16:43:08 ON 12 DEC 2003
L3            293 S L2
L4             49 S L3 AND (ASPART? OR GLUT?)
L5              1 S L4 AND COLLAGEN?
L6              3 S L3 AND COLLAGEN?
L7              2 S L6 NOT L5
L8              2 S L3 AND GRAFT?
L9              2 S L8 NOT L7

=> s l3 and cross link?
          426098 CROSS
           13646 CROSSES
          437876 CROSS
                    (CROSS OR CROSSES)
          375589 LINK?
           38755 CROSS LINK?
                    (CROSS(W)LINK?)
L10            1 L3 AND CROSS LINK?
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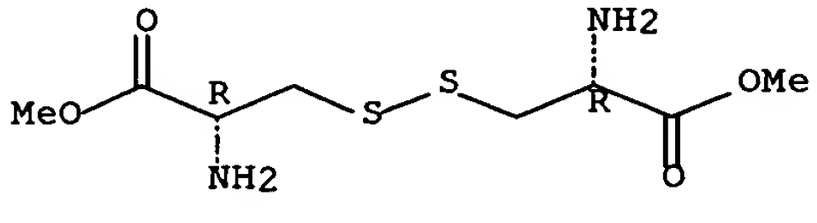
=> d

L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1989:493084 CAPLUS
DN 111:93084
TI p-Nitrophenyl 3-diazopyruvate and diazopyruvamides, a new family of photoactivatable **cross-linking** bioprobes
AU Goodfellow, Val S.; Settineri, Marc; Lawton, Richard G.
CS Dep. Chem., Univ. Michigan, Ann Arbor, MI, 48109, USA
SO Biochemistry (1989), 28(15), 6346-60
CODEN: BICHAW; ISSN: 0006-2960
DT Journal
LA English

=> d bib abs hitstr 1-
YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y

L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1989:493084 CAPLUS
DN 111:93084
TI p-Nitrophenyl 3-diazopyruvate and diazopyruvamides, a new family of photoactivatable **cross-linking** bioprobes
AU Goodfellow, Val S.; Settineri, Marc; Lawton, Richard G.
CS Dep. Chem., Univ. Michigan, Ann Arbor, MI, 48109, USA
SO Biochemistry (1989), 28(15), 6346-60
CODEN: BICHAW; ISSN: 0006-2960
DT Journal
LA English
AB p-Nitrophenyl 3-diazopyruvate (DAPpNP) was developed as a heterobifunctional crosslinking agent for synthesis of photoaffinity probes and photoactivatable crosslinking agents that are nucleophile specific. p-Nitrophenyl chloroglycoxylate is formed in high yield from oxalyl chloride and p-nitrophenol. Subsequent reaction with diazomethane produces DAPpNP in 50-60% overall yield. DAPpNP acylates primary and secondary amines to form 3-diazopyruvamides in high yields. 3-Diazopyrivamide derivs. were formed from a wide variety of amines including arom. amines, amino acids, and peptides. 3-Diazopyruvamides undergo photolysis and Wolff rearrangement at 300 nm to produce a ketene amide, which efficiently acylates nucleophilic species to form malonic acid amide derivs. A family of photoactivatable 3-diazopyruvamide crosslinking agents was synthesized from cystamine. These reagents were caused to react with rabbit muscle aldolase to form mainly dimeric crosslinked species.
IT **32854-09-4**, L-Cystine dimethyl ester dihydrochloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with diazopyruvoyl nitrophenyl ester)
RN 32854-09-4 CAPLUS
CN L-Cystine, dimethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●2 HCl

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=> d his

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L1                STRUCTURE UPLOADED
L2              96 S L1 FUL

     FILE 'CAPLUS' ENTERED AT 16:43:08 ON 12 DEC 2003
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L5               1 S L4 AND COLLAGEN?
L6               3 S L3 AND COLLAGEN?
L7               2 S L6 NOT L5
L8               2 S L3 AND GRAFT?
L9               2 S L8 NOT L7
L10              1 S L3 AND CROSS LINK?

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L1 HAS NO ANSWERS
L1                STR
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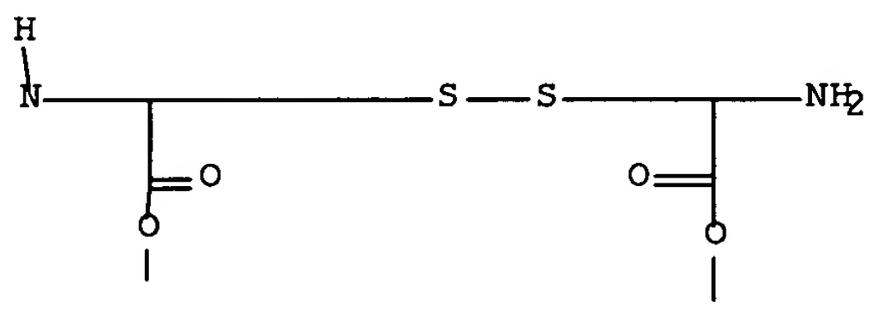


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G1 H

Structure attributes must be viewed using STN Express query preparation.

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L7               2 S L6 NOT L5
L8               2 S L3 AND GRAFT?
L9               2 S L8 NOT L7
L10              1 S L3 AND CROSS LINK?

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                                                      ENTRY    SESSION
FULL ESTIMATED COST                                   43.61     191.97

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
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